REMARKS

Claims 1-3, 5-35, and 39-40 are pending. Claims 6, 19, 24, 26, 28, 29, and 32 are amended. Claims 36-38 are cancelled. Claims 39-40 are new. In view of the following amendments and remarks, Applicants respectfully request reconsideration of the application.

The 35 U.S.C. § 112 Rejections are Moot

A. The claims are definite.

Claims 38; 29; and 6, 19, 24, 26, 28, and 32 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claim 38 is cancelled.

The word "about" is deleted from Claim 29, thus removing any perceived indefiniteness.

The trademarks have been removed from claims 6, 19, 24, 26, 28, and 32. They have been replaced with the composition and defining physical characteristics of the materials as taken from publicly available product information sheets (Affinity 1880, Selar 3426, Bynel 3095, Surlyn 1601, and Surlyn 1650) and the prior art, such as U.S. Pats. 5,928,740 (Affinity 1880); 5,382,470 (Tafmer 1085, Surlyn 1650); 5,053,259 (Selar 3426); 4,734,327 (Surlyn 1650); and 4,185,831 (Surlyn 1601). These information sheets and patents were publicly available at the time of Applicants' filing. Thus, no new matter has been added. Also, by this amendment, the claims are not narrowed. The claims have been amended to clearly incorporate limitations already present in the trademarks listed in

the specification. Thus, Applicants are entitled for protection of the full range of equivalents. The information sheets and U.S. Patents were previously submitted by IDS or are cited in the office action.

In view of these amendments, Applicants believe the § 112 rejection is moot and request withdrawal of the rejection.

The Claims are Patentable Over the Cited Art

Briefly stated, Applicants' invention is directed to thermoformable multi-layer films having enhanced resistance to abrasion, puncture, and impact, especially at low temperatures. In relation to traditional forming films, Applicants' invention reduces the incidence of film failure, especially at the corners, from the combination of product bulk, weight, cooling to 0° C, impact, and abrasion. The claimed films include at least an outer, intermediate, and inner layer. The layers are bonded at the two resulting interfaces with one or more adhesives.

The claimed thermoformable films are useful in forming processes, such as vacuum skin packaging or thermoforming, where a package is formed and sealed. In thermoforming, the film is given a three dimensional shape by drawing it into a mold. In vacuum skin packaging, a vacuum is used to draw the film around the item to be packaged prior to sealing. Unlike a heat-shrinkable film, the current invention is not stretched prior to use and then heat shrunk around an item. Because the claimed thermoformable films do not significantly shrink when heated, a vacuum is generally used to draw them around the item to be packaged.

§ 103. The Claims are Not Obvious in View of the Cited Art

Claims 1-3, 5, 7-18, 20-23, 25, 27, 29-31, and 33-38 were rejected under 35 U.S.C. § 103(a) as being obvious over *Shepard* U.S. 6,068,933 (hereinafter referred to as "*Shepard*") in view of *Wilhoit* U.S. 5,928,740 (hereinafter referred to as "*Wilhoit '740*") and *Wilhoit* U.S. 5,403,668 (hereinafter referred to as "*Wilhoit '668*"). Applicants respectfully traverse.

The § 103 rejection should be withdrawn because the invention defined by at least the independent claim 1 would not have been obvious in view of the cited prior art. First, *Wilhoit '668* is non-analogous art and cannot be properly combined to form a § 103 rejection. Second, the references fail to provide any motivation to combine their teachings and make no suggestion that their teachings could be successfully combined without impermissible hindsight - hindsight that could only be gained from Applicants' disclosure. Third, even if combined, Applicants' claimed invention would not result.

First, Applicants disagree that *Wilhoit '668* can be properly combined to form the basis of a § 103 rejection. The reference is not in the same field of endeavor, nor reasonably pertinent to Applicants' thermoforming films that are suited for use in a deep-draw apparatus. *Wilhoit '688* teaches the formation of biaxially oriented heat-shrinkable films. (Abstract). Biaxially-oriented heat-shrinkable films are known to those of ordinary skill in the art as films that tend to return to their original unstretched dimension when heated to the softening point. (See *Wilhoit*, U.S. Pat. 5,283,128, Col. 1, Lines 16-19). The heat-shrinkable films of *Wilhoit '688* are often used for light-duty packaging, not to package bulky and heavy foodstuffs, which will be subjected to high stress and abrasion. Neither can the heat-

shrinkable films of *Wilhoit '688* be used for deep-draw packaging, like the claimed films. Because the obviousness rejection is based on non-analogous art, which is not pertinent to Applicants' problem, Applicants respectfully request withdrawal.

Second, even if the cited references were in the same field, the proposed combination is improper. In combination, the cited references fail to provide any suggestion or motivation that makes Applicants' invention obvious. Neither the office action nor the references suggest that the claimed thermoforming films with enhanced puncture and abrasion resistance can be formed. Likewise, the references contain no incentive to attempt such a combination.

Shepard fails to teach an intermediate layer formed from a mixture of a nylon copolymer and amorphous nylon, as required by Applicants' claims. Instead, the reference teaches that homopolymers (such as nylon 6, nylon 6,6, nylon 6,12, or nylon 12 (Col. 10, lines 53-55)) should be blended with the amorphous nylon to the inner layers 11 and 12 or 31 and 32 surrounding the EVOH layer. While *Shepard* discloses the use of Nylon 6,66 copolymer, it is only used in an outer layer. (Col. 9, Lines 9-11). Thus, the reference teaches away from Applicants' intermediate layer.

Shepard also fails to teach an outer layer including very low density polyethylene (VLDPE) and a compatibilizer in an outer layer blend, as required by Applicants' claims. To find the missing outer layer, the office action cites *Wilhoit '668* and *Wilhoit '740*. *Wilhoit '668* teaches away from Applicants' invention, suggesting that VLDPE should be used to provide a higher shrink rate; a trait that must be avoided in thermoform films. (Col. 4, Lines

39-40). *Wilhoit '668* provides no suggestion or motivation that a high shrink rate VLDPE film could be combined with an intermediate layer of amorphous nylon and a nylon copolymer to yield a thermoforming film having enhanced puncture resistance, especially at low temperature.

Wilhoit '740 focuses on forming a heat shrinkable blended film having enhanced sealing properties for use in a heat sealing layer. (Col. 3, lines 7-15). While the blend includes the VLDPE and EVA of Applicants' outer layer, it includes additional components making it useful as a heat sealing layer. (Col. 7, lines 17-19). The reference contains no suggestion or motivation to modify the blend in accord with the claimed invention, to use it as an outer layer, and to combine the resultant layer with an intermediate layer of amorphous nylon and a nylon copolymer to yield the claimed invention.

While Applicants' component polymers may be found in the references, there is no suggestion or motivation to combine them in a way to obtain Applicants' invention without resorting to impermissible hindsight. In fact, a combination of the fair teachings of the references as a whole results in the multi-layer film of *Shepard* having its inner heat sealing layer (16, 26, 37, 46, or 56) replaced with the VLDPE blend of *Wilhoit '740*. This is not the claimed invention. Neither is there any suggestion that a portion of the thermoforming film taught in *Shepard* could be successfully combined with the heat-shrink film of *Wilhoit '668* to form the superior thermoforming films of independent claim 1. Once again, the claimed invention does not result.

In summary, the claimed nylon copolymer/amorphous nylon intermediate layer is not taught in any of the cited references, even in combination. The references also fail to provide any suggestion or motivation to use VLDPE/EVA/compatibilizer as an outer layer combined with the claimed intermediate layer to form a thermoforming film with the superior properties disclosed.

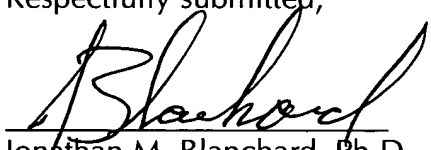
Applicants respectfully submit that the applied patents are not properly combinable to form a basis for rejection of Applicants' claims and do not form the claimed invention, even in combination. Thus, the rejection under § 103 should be withdrawn.

Applicants' remaining claims, 2-3 and 5-35, depend from independent claim 1. Therefore, the above remarks in regard to the independent claims apply equally to the dependent claims. In view of these and other differences, it cannot be said that the cited references would have made the claimed thermoformable films obvious. As such, the rejection should be withdrawn.

Conclusion

The Applicants have overcome each of the rejections. The application is therefore in condition for allowance and early notification of allowance is respectfully requested. If, for any reason, the Examiner believes that the amendments and remarks do not put the claims in condition for allowance, the undersigned attorney can be reached at (312) 321-4898 to resolve any remaining issues.

Respectfully submitted,



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